

## PSA invests further in more efficient aluminium melting operation

In March 2009, PSA PEUGEOT CITROEN put the third melting and holding furnace from StrikoWestofen GmbH into operation in its plant in Charleville-Mézières, France. The STRIKOMELTER® shaft melting furnace, type WHS-T, has a melting capability of 5,000 kg aluminum per hour and features a holding bath of 10 tons. Energy consumption below 600 kW/h for melting and heating-up of each ton of aluminum to target temperature of 720 °C was contractually guaranteed. The new furnace replaces two older units, which at that time had not been supplied by StrikoWestofen.

All guaranteed performance characteristics of the furnace were verified by PSA PEUGEOT CITROEN with the utmost care for a complete shift before the furnace was approved and contract values were achieved or even exceeded. Under current PSA production conditions, f.i. non-standard ingots sizes, furnace efficiency or melt temperature, average energy consumption of 685 kWh/to could be determined.



STRIKOMELTER® type WHS-T, tiltable, low energy consumption and high automation degree

An innovation is the fully automatic storage conveyor for the filling of the furnace by means of a sophisticated control system that allows the proportions of ingot and return material for melting to be preselected; the containers from the storage conveyor are then fed fully automatically according to the preselection. The operator adjusts only complete ingot



packages, return material and alloy blocks into the charging storage and at the same time removes emptied containers.

The plant features the collection and display of all relevant process and operational data and the furnace weighing system records all filling and extraction quantities during the melting process. The values are presented in tabular form in shift logs. The ability to collect all information into the central data collection system was of great importance for the customer. All specific customers' requests have been fulfilled.

For the PSA group, the following attributes of a STRIKOMELTER® are also of crucial importance:

- ✓ Above average metal quality for perfect casting in the mold foundry
- ✓ The melt reaches a value of 2,47 - 2,5 g/cm<sup>3</sup> vacuum-operated (corresponds to a density index of approx. 8 %)
- ✓ Constant tapping temperature
- ✓ Very high metal yield; depending on the material used it is between 98,5 % (return material) and 99,2 % (ingot melting).
- ✓ Complete collection of all operational data, storage and evaluation
- ✓ Simple and ergonomic operation
- ✓ Adherence to the environmental limit values without filter system downstream.
- ✓ Competent and reliable after Sales service; additionally StrikoWestofen GmbH ensures process engineering support to the customer.

The new plant is the third successive STRIKOMELTER® supplied to PSA PEUGEOT CITROEN and due to the high level of economy and reliability of all installations, a fourth unit is already ordered and will be delivered in December 2009.

Further information on [www.strikowestofen.com](http://www.strikowestofen.com) and [www.psa-peugeot-citroen.com](http://www.psa-peugeot-citroen.com)

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